

**IN THE CLAIMS:**

The text of all pending claims, (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered). Please CANCEL claims 1-16 and ADD new claims 17-20 in accordance with the following:

1-16. CANCELLED

17. (NEW) A system comprising:

means for outputting a first packet and a second packet, each packet including communication information of a channel in a part of a payload;

means for inputting the first packet and the second packet and extracting the communication information from the payload of the first packet and the second packet;

means for multiplexing the communication information, channel identification information of the communication information and information indicative of lengths of the communication information of the first packet and the second packet, both of the packets being transferred to a same node and having different channel identification information, into a payload of a new packet; and

means for outputting the new packet.

18. (NEW) A system comprising:

means for outputting a first packet and a second packet, each packet including communication information of a channel in a part of a payload;

means for inputting the first packet and the second packet and extracting the communication information from the payload of each of the first packet and the second packet;

means for multiplexing the communication information, channel identification information of the communication information and information indicative of lengths of the communication information of the first packet and the second packet, both of the packets being transferred to a same node and having same channel Identification information, into a payload of a new packet; and

means for outputting the new packet.

19. (NEW) A multiplexing device in a system including means for outputting a first packet and a second packet, each packet including communication information of a channel in a part of a payload, the multiplexing device comprising:

means for inputting the first packet and the second packet and extracting the communication information from the payload of each of the first packet and the second packet;

means for multiplexing the communication information, channel identification information of the communication information and information indicative of lengths of the communication information of the first packet and the second packet, both of the packets being transferred to a same node and having a same channel identification information, into a payload of a new packet; and

means for outputting the new packet.

20. (NEW) A method comprising:

outputting a first packet and a second packet, each including communication information of a channel in a part of a payload;

inputting the first packet and the second packet and extracting the communication information from the payload of each of the first packet and the second packet;

multiplexing the communication information, channel identification information of the communication information and information indicative of lengths of the communication information of the first packet and the second packet, both of the packets being transferred to a same node, into a payload of a new packet; and outputting the new packet.